

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Timothy Wood et al.

Serial No.: Not yet assigned

Group Art Unit: 1652

Filed: Concurrently herewith

Examiner: S. Swope

Title: NOVEL MATRIX METALLOPROTEINASES

EXPRESS MAIL INFORMATION
EXPRESS MAIL LABEL NO: EL964555149US

DATE OF DEPOSIT: March 3, 2004

Mail Stop: Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

S I R :

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the attached PTO-1449, PTO/SB/08b and PTO-892 forms submitted herewith.

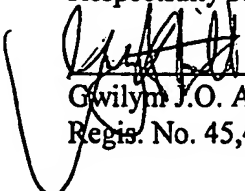
Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

Copies of the references cited on the attached forms can be found in the parent case, U.S. Serial No. 09/862,631, filed May 22 2001.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

No first Official Action has yet been received and it is presumed that none has yet been mailed. No fee or certification is required. 37 C.F.R. § 1.97(b).

Respectfully submitted,



Gwilym J.O. Attwell
Regis. No. 45,449

Enclosures:

PTO-1449 (18 sheets)
PTO/SB/08b (1 sheet)
PTO-892 (2 sheets)

Dated: March 3, 2004



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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. 00014regUS/ PHRM-0444	Serial No. 09/862,631
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	AB	Altschul et al., "Basic Local Alignment Search Tool," <i>J. Mol. Biol.</i> , 1990, 215, 403-410	
	AC	American Veterinary Medical Association, <i>Report of the American Veterinary Medical Assoc.</i> , Panel on Euthanasia, <i>Journal of American Veterinary Medical Assoc.</i> , 1993, 202, 229-249	
	AD	Anderson, "Human Gene Therapy", <i>Nature</i> , 1998, Suppl. To Vol. 392, No. 3379, pp. 25-30	
	AE	Anderson, W. F., "Human gene therapy," <i>Science</i> , 1992, 256, 808-813	
	AF	Aujame et al., "High Affinity Human Antibodies by Phage Display", <i>Human Antibodies</i> , 1997, Vol. 8, No. 4, pp. 155-168	
	AG	Ausubel, et al. (Eds.), "Chapter 6, Screening of recombinant DNA libraries," <i>Current Protocols in Molecular Biology</i> , 1994, John Wiley & Sons, 6.0.1-6.4.10	
	AH	Baindur et al., " Selective fluorescent ligands for pharmacological receptors," <i>Drug Dev. Res.</i> , 1994, 33, 373-398	
	AI	Baker et al., "Induction of Acetylcholine Receptor Clustering by Native Polystyrene Beads. Implication of an Endogenous Muscle-derived Signalling System", <i>J. Cell Sci.</i> , 1992, Vol. 102, pp. 543-555	
	AJ	Benoist et al., "In vivo sequence requirements of the SV40 early promoter region," <i>Nature</i> , 1981, 290, 304-310	
	AK	Bertilsson, G. et al., "Identification of a human nuclear receptor defines a new signaling pathway for CYP3A induction", <i>Proc. Natl. Acad. Sci. USA</i> , 1998, 95, 12208-12213	
	AL	Bossé, R., et al., "Development of nonseparation binding and functional assays for G protein-coupled receptors for high throughput screening: Pharmacological characterization of the immobilized CCR5 receptor on FlashPlate®," <i>J. Biomolecular Screening</i> , 1998, 3(4), 285-292	
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	AO	Cane, D. E., et al., "Harnessing the Biosynthetic Code: Combinations, Permutations, and Mutations," <i>Science</i> , Oct. 1998, 282, 63-68	
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	AQ	Cheng, L. et al., "Adenovirus-mediated gene transfer of the human tissue inhibitor of metalloproteinase-2 blocks vascular smooth muscle cell invasiveness in vitro and modulates neointimal development in vivo", <i>Circulation</i> , 1998, 98, 2195-2201	
	AR	Choo, Y., et al., "Promoter-specific activation of gene expression directed by bacteriophage-selected zinc fingers," <i>J. Mol. Biol.</i> , 1997, 273, 525-532	
	AS	Cosman, D., et al., "High Level Stable Expression of Human Interleukin-2 receptors in Mouse Cells Generates only Low Affinity Interleukin-2 Binding Sites," <i>Mol. Immunol.</i> , 1986, 23(9), 935-941	
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	AU	Dayoff, in <i>Atlas of Protein Sequence and Structure</i> , 1972, National Biochemical Research Foundation, Washington, D.C., 5, 124	
	AV	Deckert, T. et al., "Implications for micro-and macrovascular disease", <i>Diabetes Care</i> , 1992, 15(9), 1181-1191	
	AW	Douglas, A. M., et al., "Direct sequencing of double-stranded PCR products incorporating a chemiluminescent detection procedure," <i>Biotechniques</i> , 1993, 14, 824-828	
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	BA	Falk, E. et al., "Coronary plaque disruption", <i>Circulation</i> , 1995, 92, 657-671	
	BB	Fields, S., et al., "A novel genetic system to detect protein-protein interactions," <i>Nature</i> , 1989, 340, 245-246	
	BC	Fields, S., et al., "The two-hybrid system: an assay for protein-protein interactions," <i>Trends in Genetics</i> , 1994, 10, 286-292	
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	BE	Foote, J., et al., Antibody framework residues affecting the conformation of the hypervariable loops," <i>J. Mol. Biol.</i> , 1992, 224, 487-499	
	BF	Forough, R. et al., "Overexpression of tissue inhibitor of matrix metalloproteinase-1 inhibits vascular smooth muscle cell functions in vitro and in vivo", <i>Cir. Res.</i> , 1996, 79(4), 812-820	
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	BH	Friedmann, T., "Progress toward human gene therapy," <i>Science</i> , 1989, 244, 1275-1281	
	BI	Fuster, V. et al., "Acute coronary syndromes: biology", <i>Lancet</i> , 1999, 353(suppl. II), 5-9	
	BJ	Gerhardt, C. C., et al., "Functional characteristics of heterologously expressed 5-HT receptors," <i>Eur. J. Pharmacology</i> , 1997, 334, 1-23	
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	BN	Henikoff, S., et al., "Amino acid substitution matrices from protein blocks," <i>Proc. Natl. Acad. Sci. USA</i> , 1992, 89, 10915-10919	
	BO	Hill, D. C., "Trends in development of high-throughput screening technologies for rapid discovery of novel drugs," <i>Cur. Opinion Drug Disc. Dev.</i> , 1998, 1(1), 92-97	
	BP	Hoogenboom H. R., "Designing and optimizing library selection strategies for generating high-affinity antibodies," <i>TIBTECH</i> , 1997, 15, 62-70	
	BQ	Jampol, L. et al., "Peripheral proliferative Retinopathies", <i>Surv. Ophthalmol.</i> , 1980, 25(1), 1-14	
	BR	Jayawickreme, C. K., et al., "Gene expression systems in the development of high-throughput screens, <i>Current Opinion in Biotechnology</i> , 1997, 8, 629-634	
	BS	Jones, P. T., et al., "Replacing the complementarity-determining regions in a human antibody with those from a mouse," <i>Nature</i> , 1986, 321, 522-525	
	BT	Karlin, S., et al., "Applications and statistics for multiple high-scoring segments in molecular sequences," <i>Proc. Natl. Acad. Sci. USA</i> , 1993, 90, 5873-5787	
	BU	Kettleborough, C. A., et al., "Humanization of a mouse monoclonal antibody by CDR-grafting: the importance of framework residues on loop conformation," <i>Protein Engin.</i> , 1991, 4(7), 773-783	
	BV	Kieleczawa, J., et al., "DNA sequencing by primer walking with strings of contiguous hexamers," <i>Science</i> , 1992, 258, 1787-1791	
	BW	Kim, J., et al., "Design of TATA box-binding protein/zinc finger fusions for targeted regulation of gene expression," <i>Proc. Natl. Acad. Sci. USA</i> , 1997, 94, 3616-3620	
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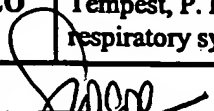
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	CB	Liu, Q., et al., "Design of polydactyl zinc-finger proteins for unique addressing within complex genomes," <i>Proc. Natl. Acad. Sci. USA</i> , 1997, 94, 5525-5530	
	CC	Luckow, V. A., et al., "High Level Expression of Nonfused Foreign Genes with Autographa californica Nuclear Polyhedrosis Virus Expression Vectors," <i>Virology</i> , 1989, 170, 31-39	
	CD	Luckow, V. A., et al., "Trends in the development of baculovirus expression vectors," <i>Bio/Technology</i> , 1988, 6, 47-55	
	CE	Makishima, M. et al., "Identification of a nuclear receptor for bile acids", <i>Science</i> , 1999, 284, 1362-1365	
	CF	Maxam, A. M., et al., "Sequencing end-labeled DNA with bse-specific chemical cleavages", <i>Meth. Enzymol.</i> , 1977, Vol. 65, 499-560	
	CG	McColl, D. J., et al., "Structure-based design of an RNA-binding zinc finger", <i>Proc. Natl. Acad. Sci. (USA)</i> , 1997, Vol. 96, 9521-9526	
	CH	Miller, A. D., "Human gene therapy comes of age", <i>Nature</i> , 1992, Vol. 357, pp. 455-460	
	CI	Mirzabekov, A. D., "DNA sequencing by hybridization - A megasequencing method and a diagnostic tool?", <i>TIBTECH</i> , 1994, Vol. 12, 27-32	
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85	CK	Myers, R. M., et al., "Detection of single base substitutions by ribonuclease cleavage at mismatches in RNA: DNA duplexes", <i>Science</i> , 1985, Vol. 230, 1242-1246	
	CL	Myers, P., "Will combinatorial chemistry deliver real medicines," <i>Curr. Opin. Biotechnology</i> , 1997, 8, 701-707	
	CM	Nagase, H. et al., "Matrix metalloproteinases", <i>J. Biol. Chem.</i> , 1999, 274(31), 21491-21494	
	CN	Nakayama, G. R., "Microplate assays for high-throughput screening," <i>Cur. Opinion Drug Disc. Dev.</i> , 1998, 1, 85-91	
	CO	Newby, A.C. et al., "Extracellular matrix degrading metalloproteinases in the pathogenesis of arteriosclerosis", <i>Basic Res. Cardiol.</i> , 1994, 89(suppl. 1), 59-70	
	CP	Okayama, H., et al., "A cDNA cloning vector that permits expression of cDNA inserts in mammalian cells," <i>Mol. Cell. Biol.</i> , 1983, 3(2), 280-289	
	CQ	Orita, M., et al., "Detection of polymorphisms of human DNA by gel electrophoresis as single-strand conformation polymorphisms," <i>Proc. Natl. Acad. Sci. USA</i> , 1989, 86, 2766-2770	
	CR	Padlan, E. A., "A possible procedure for reducing the immunogenicity of antibody variable domains while preserving their ligand-binding properties," <i>Molecular Immunol.</i> , 1991, 28(4/5), 489-498	
	CS	Parks, D. et al., "Bile acids: Natural ligands for an orphan nuclear receptor", <i>Science</i> , 1999, 284, 1365-1368	
	CT	Pastinen, T., et al., "Minisequencing: A specific tool for DNA analysis and diagnostics on oligonucleotide arrays," <i>Genome Res.</i> , 1997, 7, 606-614	
	CU	Pausch, M. H., "G-protein-coupled receptors in <i>saccharomyces cerevisiae</i> : high-throughput screening assays for drug discovery," <i>Trends in Biotechnology</i> , 1997, 15, 487-494	
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	CX	Pillemer, G., et al., "Insulin dependence of murine lymphoid T-cell leukemia," <i>Int. J. Cancer</i> , 1992, 50, 80-85	
	CY	Pindon, A., et al., "Thrombin-induced reversal of astricyte stellation is mediated by activation of protein kinase C β -1," <i>Eur. J. Biochem.</i> , 1998, 255, 766-774	
	CZ	Posner, I., et al., "Kinetics of inhibition by tyrphostins of the tyrosine kinase activity of the epidermal growth factor receptor and analysis," <i>Molecular Pharmacology</i> , 1993, 45, 673-683	
	DA	Pulver, A. E., et al., "The Johns Hopkins University Collaborative Schizophrenia Study: An Epidemiologic-Genetic Approach to Test the Heterogeneity Hypothesis and Identify Schizophrenia Susceptibility Gene," <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , ©1996, 61, 797-814	
	DB	Qu et al., "A Role for melanin-concentrating hormone in the central regulation of feeding behaviour", <i>Nature</i> , 1996, 380, 243-247	
	DC	Rader, C., et al., "Phage display of combinatorial antibody libraries," <i>Curr. Opin. Biotechnol.</i> , 1997, 8, 503-508	
	DD	Ramsay, G., "DNA chips: state-of-the-art," <i>Nature Biotechnology</i> , 1999, 16, 40-48	
	DE	Reece, P. A., et al., "Pharmacokinetics of trimetrexate administered by five-day continuous infusion to patients with advanced cancer," <i>Cancer Research</i> , 1987, 47(11), 2996-2999	
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	DI	Riesner, D., et al., "Temperature-gradient gel electrophoresis of nucleic acids: Analysis of conformational transitions, sequence variations, and protein-nucleic acid interactions," <i>Electrophoresis</i> , 1989, 10, 377-389	
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	DN	Saito, Y., et al., "Molecular characterization of the melanin-concentrating-hormone receptor," <i>Nature</i> , 1999, 400, 265-269	
	DO	Sakurai, T., et al., "Orexins and orexin receptors: A family of hypothalamic neuropeptides and G protein-coupled receptors that regulate feeding behavior," <i>Cell</i> , 1998, 92, 573-585	
	DP	Sanger, F., et al., "DNA sequencing with chain-terminating inhibitors," <i>Proc. Natl. Acad. Sci. USA</i> , 1977, 74(12), 5463-5467	
	DQ	Sauro, M. D., et al., "Tyrphostin attenuates platelet-derived growth factor-induced contraction in aortic smooth muscle through inhibition of protein tyrosine kinase(s)," <i>J. Pharm. And Experimental Therapeutics</i> , 1993, 267(3), 1119-1125	
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	DX	Shumaker, J. M., et al., "Mutation detection by solid phase primer extension," <i>Hum. Mutat.</i> , 1996, 7, 346-354	
	DY	Sikora, E., et al., "Quinazoline CB 3717 and CB 3703 inhibition of folate retention and metabolism in ehrlich ascites carcinoma cells and some organs of the host-mouse," <i>Cancer Letters</i> , 1984, 23, 289-295	
	DZ	Sikora, E., et al., "Development of an assay for the estimation of N ¹⁰ -propargyl-5,8-dideazafolic acid polyglutamates in tumor cells," <i>Analytical Biochemistry</i> , 1988, 172, 344-355	
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	EB	Smith, T. F., et al., "Comparison of biosequences," <i>Adv. Appl. Math.</i> , 1981, 2, 482-489	
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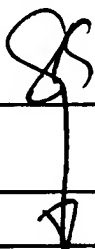
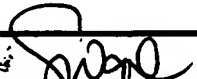
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				Filing Date May 22, 2001		Group 1632	
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ND	GN	WO 01/16335 A2	03/08/01	PCT	X abstract		
EXAMINER <i>ST</i>				DATE CONSIDERED 111105			

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	09/862,631
Filing Date	May 22, 2001
First Named Inventor	Timothy Wood
Group Art Unit	1652
Examiner Name	Sheridan Swope
Attorney Docket Number	PHRM0019-100

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS); title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JS	FG	Ausubel, F.M., (ed.) Current Protocols in Molecular Biology, Wiley and Sons, New York, Volume 3, 1988.	
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Art Unit

1652

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